Cleaning Standard

For South Australian Healthcare Facilities 2021



Disclaimer

This Cleaning Standard provides advice of a general nature and has been prepared to promote and facilitate standardisation and consistency of practice.

The Cleaning Standard is based on a review of published evidence and expert opinion.

Information in this statewide standard is current at the time of publication.

Cleaning Standards for Healthcare Facilities ©Government of South Australia, December 2021 ABN 97643356590 ISBN 978-1-76083-418-0

This standard can be accessed at the Department for Health and Wellbeing Internet site www.sahealth.sa.gov.au/infectionprevention

Department for Health and Wellbeing Adelaide, South Australia 5000 Telephone: 1300 232 272 Email: HealthICS@sa.gov.au

SA Health does not accept responsibility for the quality or accuracy of material on websites linked from this site and does not sponsor, approve or endorse materials on such links.

Со	nte	nts
----	-----	-----

Pre	eface		3	
Cle	Cleaning Standard Working Group			
11	ntroc	luction	4	
1.1	Abou	t this document	4	
1.2	Scop	е	5	
1.3	Gloss	ary	6	
1.4	Abbre	eviations	8	
2	Basic	cs of infection control	9	
2.1	Sourc	ce/reservoir	9	
2.2	Susce	eptible host	10	
2.3	Trans	mission of Infection	10	
	2.3.1	Contact transmission	10	
	2.3.2	Droplet transmission	10	
	2.3.3	Airborne transmission	10	
	2.3.4	Common vehicle transmission	11	
	2.3.5	Vector borne transmission	11	
2.4	Princi	ples of infection prevention and cont	trol 11	
	2.4.1	Standard precautions	11	
	2.4.2	Transmission-based precautions	11	
3	Staff	health – protecting yourself		
		others	12	
3.1	Hand	hygiene	12	
3.2	Coug	h etiquette	14	
3.3	Persc	onal protective equipment (PPE)	14	
	3.3.1	Gowns and aprons	15	
	3.3.2	Eye protection, masks and		
		face shields	15	
	3.3.3	Gloves	15	
34	Prove	nting sharps injuries	16	

3.4Preventing sharps injuries163.5Waste and linen173.6Illness policy173.7Accidental exposure173.8Staff immunisation17

4		ning chemicals, equipment	
	and t	echnique	18
4.1	Clean	ing chemicals	18
	4.1.1	Disinfectants	19
	4.1.2	Chemical application	19
	4.1.3	Chemical claims	19
	4.1.4	Chemical concentration	19
	4.1.5	Contact time	19
	4.1.6	Other factors affecting the chemical effectiveness.	19
4.2	Clean	ling equipment	20
	4.2.1	Dust control	20
	4.2.2	Aerosols	20
	4.2.3	Cleaning cloths (excluding	
		microfibre type)	20
		Microfibre cleaning cloths/mops	21
	4.2.5	Detergent and/or disinfectant- impregnated wipes	21
	4.2.6	Colour coded cleaning	
		materials and equipment	21
	4.2.7		22
4.0	<u> </u>	cleaning equipment	22
		ng techniques	22
4.4	-	ing Environmental Cleaning ologies	23
5	The o	cleaning schedule	24
5.1	Funct	ional areas	24
	5.1.1	How was the risk classification of functional areas determined?	24
	5.1.2	Amending the risk classification	
		of functional areas	25
	5.1.3	New functional areas	25
5.2	Eleme	ents	26
	5.2.1	How was the cleaning frequency a	and
		method determined for	20
	F O O	each element?	26
	5.2.2	Amending the cleaning	26
	572	frequency of elements Amending the cleaning	20
	J.Z.J	method of elements	26
	5.2.4	New elements	26
5.3	The c	leaning schedule	27

5.4 Special circumstances 29

6	The environmental hygiene		
	program		
6.1	Organisational chart and		
	governance structure	30	
6.2	Facility map	30	
6.3	Site specific cleaning schedule	30	
6.4	Staff skills/knowledge and staff		
	resource levels	31	
	6.4.1 Staff skills and knowledge	31	
	6.4.2 Staff resources	31	
6.5	Cleaning chemicals and equipment	31	
6.6	Documentation of cleaning techniques	32	
6.7	7 Record keeping and registers		
6.8	Internal verification and assessment	32	
7	Audit system	34	
7.1	Internal audits		
7.2	External audits	35	

8 Key reference documents 36

Appendices	37
Appendix 1: When to wash your hands?	38
Appendix 2: Sample of general cleaning practices	39
Appendix 3: Sample of discharge cleaning procedure	40
Appendix 4: Management of blood and body substance spills	42
Appendix 5: Risk matrix and classification of functional areas supporting information	44
Appendix 6: Risk classification of functional areas within hospitals	44
Appendix 7: Cleaning schedule	44
Appendix 8: Audit tool (internal)	44
Appendix 9: Audit tool (external)	44



Preface

This document addresses cleaning of the physical environment in healthcare facilities as it relates to the prevention and control of infections. It has been prepared in consultation with a dedicated group of individuals from within SA Health who have expertise in cleaning/housekeeping services management or infection prevention and control. The members of the working group are listed below.

This document is targeted to those who have a role in the management of cleaning/housekeeping services for the healthcare setting. This includes administrators, cleaning/housekeeping services managers, cleaning supervisors, nurse managers and infection prevention and control professionals.

The practices recommended in this document reflect the best evidence and expert opinion available at the time of writing. As new information becomes available, this document will be reviewed and updated.

This document was reviewed in August 2021 and references were updated. No changes were made to the content or appendices.

Cleaning Standard Working Group 2010

Anita Benovic	Project Officer, Food Safety & Audit, SA Department for Health and Ageing
Karen Ferres	Manager, Food Safety & Audit, SA Department for Health and Ageing
Linda Henderson	Nurse Advisor, Infection Control Service, SA Department for Health and Ageing
Irene Wilkinson	Manager, Infection Control Service, SA Department for Health and Ageing
Samantha Butenko	Clinical Service Coordinator, Infection Prevention & Control Unit, Royal Adelaide Hospital
Shelley Crooks	Manager Corporate – Statewide Services, Central Adelaide Local Health Network
Judy Hicks	Infection Control Coordinator, Murray Bridge & Mt Barker Hospitals, Country Health SA Local Health Network
Marija Juraja	Clinical Service Coordinator, Infection Prevention & Control Unit, The Queen Elizabeth Hospital.
Cheryl Rosiak	Clinical Service Coordinator, Infection Prevention & Control Unit, Women & Children's Hospital
Mark Walker	Cleaning Services Manager, Southern Adelaide Local Health Network

1 Introduction

Effective infection prevention and control is central to providing high quality health care for all patients and a safe work environment for those that work in the healthcare setting. Healthcare associated infections (HAIs) may occur as a result of clinical interventions in any healthcare setting where care is delivered.

Understanding the modes of transmission of infectious micro-organisms helps to explain why patient care environments within the healthcare facility must be maintained to a high standard of cleanliness. Therefore adequate training in these principles should be provided for all personnel responsible for cleaning.

In July 2011, the Australian Commission for Safety and Quality in Health Care released a set of National Safety and Quality Health Service Standards. These were used for accreditation of health care facilities and address the relevant Standards at the time. The 2021 second edition, of the Standards (Actions 3.11 and 3.12) address the requirement for an effective cleaning system that includes an established cleaning schedule and regular auditing.

1.1 About this document

The Cleaning Standard was initially developed to establish a statewide approach to environmental cleaning and associated infection prevention and control in South Australian healthcare facilities. This version is the third update of the Cleaning Standard.

Contained within the Cleaning Standard is the Cleaning Schedule which describes the suggested minimum cleaning frequency and method for all areas within a healthcare facility. It is acknowledged that there may be some instances where the Cleaning Schedule may need to be adjusted based on local circumstances and knowledge. In addition, the Standard specifies the hygiene program which facilities need to implement to ensure these minimum requirements are achieved.

The Cleaning Standard, in particular the Cleaning Schedule, is closely aligned with the NHMRC *Australian Guidelines for the Prevention and Control of Infection in Healthcare 2019*. The Cleaning Standard is designed to assist cleaning and housekeeping services staff, cleaning services managers, nursing staff and infection prevention and control coordinators to achieve the minimum requirements.

It is acknowledged that other guidelines were used in the development of this Cleaning Standard including:

- > Government of Victoria Cleaning standards for Victorian health facilities 2011
- > NSW Health Environmental Cleaning Policy and audit tool, 2012
- Provincial Infectious Diseases Advisory Committee, Ontario Canada Best practices for Environmental Cleaning for Prevention and Control of Infections 2009
- > National Patient Safety Agency (UK) The national specification for cleanliness in the NHS: A framework for setting and measuring performance outcomes 2007, and The revised health care cleaning manual 2009.

The Cleaning Standard may make reference to, but does not include detailed information on:

- > infectious diseases
- > the reprocessing of reusable medical instruments or devices
- > work health and safety
- > services such as food, laundry and waste disposal
- > engineering maintenance such as cooling towers and warm water systems
- > healthcare facility design.

1.2 Scope

The Cleaning Standard applies to all SA Health public healthcare facilities, including all public hospitals, rehabilitation centres, outpatient satellite treatment units, and residential care units contained within hospitals. In addition, the information contained in the Cleaning Standard may be useful for other facilities or areas where health care may be delivered, e.g. treatment areas in correctional facilities, GP Plus centres, pre-hospital emergency/ambulance services and community health centres.

The Cleaning Standard applies regardless of whether the cleaning is provided in-house or contracted to an external provider. It is the responsibility of the healthcare facility to ensure that any contract with an external provider is based on the minimum requirements as specified in the Cleaning Standard and associated Cleaning Schedule.

The Cleaning Schedule contained within the Cleaning Standard is designed to produce a clean and odour-free environment that is fit for purpose. This means that all surfaces are free from foreign matter such as dust, dirt, litter, cobwebs, mould, fingerprints, streaks, stains, greasy marks and residues. All surfaces should be intact and constructed of materials which facilitate effective cleaning.

The Cleaning Standard does not apply to external building surrounds, food preparation areas or the special cleaning requirements that may be required after a surgical procedure on a patient suspected or diagnosed with prion disease, e.g. Creutzfeldt-Jacob Disease (CJD).

These specialised areas which are covered by different legislations or guidelines, namely the Food Act 2001 (SA) and the Australian Government recommendations for infection prevention and control procedures to minimise the risk of transmission of <u>Creutzfeldt - Jakob disease (CJD) in health care settings</u>.

1.3 Glossary

Aerosol-generating procedure	Procedures that are more likely to generate higher concentrations of infectious respiratory aerosols than coughing, sneezing or breathing.		
Alcohol-based hand rub	a Therapeutic Goods Administration (TGA) registered alcohol-containing preparation designed for reducing the number of viable micro-organisms on the hands without the use or aid of running water and which is included on the Australian Register of Therapeutic Goods (ARTG) as a medicinal product.		
АТР	adenosine triphosphate (used as a marker of biological contamination).		
Clostridioides difficile	a spore-forming anaerobic bacterium which causes gastro-intestinal illness, usually in association with the administration of antibiotics (antibiotic-associated diarrhoea or colitis).		
Case	a patient who has been confirmed/suspected to be colonised or infected with a multidrug-resistant organism e.g. methicillin-resistant Staphylococcus aureus (MRSA), vancomycin-resistant Enterococci (VRE), infectious respiratory pathogen, infectious gastroenteritis, <i>Clostridioides difficile</i> or other pathogen of epidemiological significance.		
Colonisation	the presence, growth and multiplication of micro-organisms without observable signs or symptoms of infection.		
Contamination	 Heavy Contamination (score = 3): an area is designated as being heavily contaminated if surfaces and/or equipment are routinely exposed to biological contaminants (e.g. blood or other body fluids in areas such as operating room, birthing suite, autopsy suite, cardiac catheterisation laboratory, haemodialysis, emergency room, client/patient/resident bathroom if visibly soiled). Moderate Contamination (score = 2): an area is designated as being moderately contaminated if surfaces and/or equipment do not routinely (but may) become contaminated with blood or other body fluids and the contaminated fluids are contained or removed (e.g. wet sheets); all client/patient/resident rooms and bathrooms should be considered to be, at a minimum, moderately contaminated. Light Contamination (score = 1): an area is designated as being lightly contaminated if surfaces are unlikely to be exposed to blood, other body fluids or items that have come into contact with blood or body fluids (e.g. lounges, libraries, offices, consulting areas, nurses' stations). 		
Cough etiquette	a series of actions to taken when coughing or sneezing; these actions are designed to reduce the spread of respiratory illness to others.		
Detergent solution	a detergent product which is intended to be used in the cleaning of surfaces or other medical devices and diluted with water (if necessary) as per manufacturer's instruction.		
Discharge clean	the thorough cleaning of a client/patient/resident room or bed space following discharge, death or transfer of the client/patient/resident.		
Disinfectant	a chemical substance that is intended to be used in disinfection of surfaces.		
Disinfection	the destruction of pathogenic and other kinds of micro-organisms by physical or chemical means.		
Element	refers to an item such as a surface, article or fixture to be cleaned.		

Food grade sanitiser	odourless substances approved for use in a food-processing environment, capable of reducing the number of pathogenic or disease causing bacteria on a food contact surface to a safe level; the main difference between a sanitiser and a disinfectant is that at a specified use dilution, the disinfectant must have a higher kill capability for pathogenic bacteria compared to that of a sanitiser.
Functional area	refers to any area within the healthcare facility in which cleaning occurs, for example: operating theatre, intensive care unit, general ward, administration/ office area.
Hand hygiene	a general term applied to processes aimed at reducing the number of micro- organisms on hands; this includes: application of a waterless antimicrobial agent (e.g. alcohol-based hand rub) to the surface of the hands, or the use of soap (plain or antimicrobial) and water (if hands are visibly soiled).
High-efficiency particulate air (HEPA) filter	an air filter that removes 99.97% of particulates >0.3 microns (the most penetrating particle size) at a specified flow rate of air.
Impetigo	a superficial skin infection caused by <i>Staphylococcus</i> or <i>Streptococcus</i> bacterial species; the bacteria can easily spread to other parts of the infected person's body or to other people directly by contact with sores or indirectly by contact with contaminated clothes.
Infection	refers to the invasion of micro-organisms into host tissues with replication of the organism accompanied by signs of illness such as fever and inflammation.
Infectious agent	any micro-organism /pathogen (bacterium, virus, fungus or parasite) that is capable of causing disease; also known as a microbe or germ.
Isolated case	single, unrelated case of infection or colonisation with a multidrug-resistant organism (e.g. MRSA, VRE), infectious respiratory pathogen, infectious gastroenteritis, <i>Clostridioides difficile</i> or other pathogen of epidemiological significance.
Micro-organism	see infectious agent.
Multidrug-resistant organism (MRO)	refers: to any potentially pathogenic bacterial species that is resistant to one or more classes of antibiotics; also called multi-drug resistant organism; this includes carbapenemase-producing Enterobacterales (CPE), methicillin-resistant <i>Staphylococcus aureus</i> (MRSA), multi-resistant Gram-negative bacilli (MRGN), and Vancomycin-resistant Enterococci (VRE).
Normal microbial flora	refers to: micro-organisms that normally reside on the surface or inside the body (e.g. the intestine) and are important for maintaining good health.
Outbreak	 An outbreak is defined as: (1) occurrence of more cases of an infectious disease than expected in a given area among a specific group of people over a specified period of time; or (2) two or more linked cases of the same illness.
Prion	A prion is an infectious protein molecule that has been shown to cause a rare type of brain disease, e.g. Creutzfeldt-Jacob Disease (CJD).
Scabies	an infestation of the skin caused by the scabies mite <i>Sarcoptes scabiei</i> . The mite is about 0.2-0.4mm long and cannot easily be seen without magnification.

Spore	a dormant non-reproductive body formed by certain bacteria (such as <i>Clostridioides difficile</i>) in response to adverse environmental conditions; spores are highly resistan to drying, heat and chemicals.		
Standard precautions	cautions are work practices required to achieve a basic level of infection control and are recommended for the treatment and care of all patients.		
Susceptibility	 Highly susceptible: where most clients/patients/residents within the functional area are highly susceptible to infection due to their medical condition or lack of immunity. These include patients who are severely neutropenic or immuno-compromised (e.g. oncology, haematology, transplant, renal), neonates (level 2/3 nurseries) and those who have severe burns. Least susceptible: all other individuals and areas are classified as less 		
Touris al ale antica	susceptible.		
Terminal cleaning	see discharge clean.		
Touch surfaces	> High touch surfaces: (also known as frequently touched surfaces) are those surfaces that have frequent contact with hands; examples include patient care areas (bedrails, over-way tables, doorknobs, telephone, call bells, light switches, edges of privacy curtains) and bathroom surfaces (toilet seat, flush button, taps).		
	> Low touch surfaces: (also known as: minimally touched surfaces) are those surfaces that have minimal contact with hands; examples include: floors, walls, ceilings, mirrors and windows.		
Transmission-based precautions	are additional precautions used in situations where standard precautions alone may be insufficient to prevent transmission of infection; the precautions used depend on the transmission route of the particular infectious agent.		
Whooping cough (pertussis)			

1.4 Abbreviations

ABHR	Alcohol-based hand rub
AGP	Aerosol-generating procedure
CPE	Carbapenemase-producing Enterobacterales
HAI	Healthcare associated infection
ICS	Infection Control Service, Communicable Disease Control Branch, SA Department for Health and Wellbeing
MRGN	Multi-resistant Gram-negative organism
MRO	multidrug-resistant organism
MRSA	Methicillin-resistant Staphylococcus aureus
PPE	Personal protective equipment
SDS	Safety data sheet
TGA	Therapeutic Goods Administration
VRE	Vancomycin-resistant enterococci

2 Basics of infection control

Micro-organisms (including bacteria, viruses, fungi and parasites) exist naturally in the environment and on or within the bodies of animals and people. However, not all micro-organisms cause infections. The ability of a micro-organism to cause infection is dependent upon its ability to produce disease (i.e. its pathogenicity), the number of micro-organisms required to cause illness (i.e. the infectious dose) and the susceptibility of the host (person).

When an infection occurs in a patient who is in hospital for another reason, this is known as a healthcare associated infection (HAI). The acquisition of a HAI depends on many factors including: the patient's age, immune status and pre-existing illnesses; presence of wounds or indwelling medical devices; and opportunities for transmission. Many of these factors are not controlled by environmental cleaning; however by understanding the transmission of infection, cleaning staff can gain an appreciation of the importance of their duties and how they aid in minimising the risk of HAI.

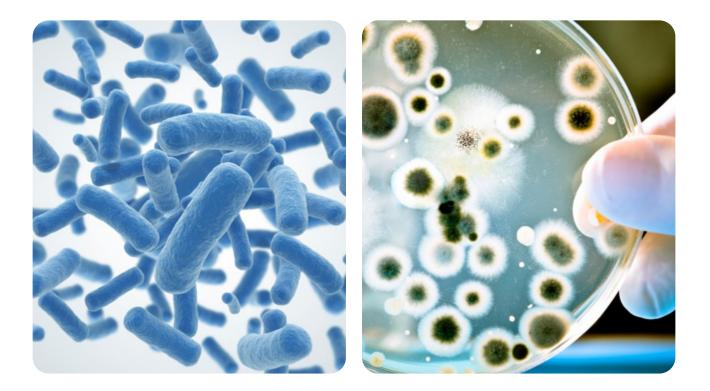
Transmission of infectious micro-organisms within a healthcare setting requires the following three conditions:

- > a source or reservoir of the infectious agent
- > a susceptible host (vulnerable person)
- > a mode of transmission.

2.1 Source/reservoir

Infectious agents transmitted during health care originate primarily from human sources, including patients, healthcare workers and visitors to the facility. The source may be a person who is ill but may also be a person who is in the incubation period of a disease and is not yet displaying symptoms, or they may be a temporary or chronic carrier of an infectious agent, with or without symptoms.

There are other sources of micro-organisms that may cause infection and these include a person's own normal microbial flora and environmental sources such as air, water, medication or medical equipment that may have become contaminated.



2.2 Susceptible host

In healthcare settings, the most common susceptible hosts are patients and non-immune healthcare workers.

For the patient, the level of risk of infection relates to the healthcare setting, the type of procedures performed and the underlying health status of the patient. For example, patients who have experienced trauma or have undergone surgical procedures, or other therapeutic and diagnostic procedures, may be more susceptible to infection.

For healthcare workers the level of risk is related to the type of infectious agent, the type of clinical contact healthcare workers have with potentially infected or colonised patient groups, instruments or environments, and the health status of healthcare workers themselves (eg. whether they are immunised or immuno-compromised). These risks can be successfully mitigated by applying standard and transmission-based precautions.

2.3 Transmission of Infection

Infectious micro-organisms are transmitted by five main routes. These are:

- > contact
- > droplet
- > airborne
- > common vehicle
- > vector borne.

Each of these is explained more fully below.

2.3.1 Contact transmission

The most important and frequent means of infection transmission can be divided into two subgroups: direct contact transmission and indirect contact transmission.

- Direct contact transmission occurs when infectious micro-organisms are transferred from one person to another by touching, and involves transfer of micro-organisms from an infected or colonised person directly to a susceptible host.
- Indirect contact transmission involves transfer of infection via contact with a contaminated inanimate object, such as medical instruments or equipment. Infectious organisms can also be carried on the hands of healthcare workers through contact with a patient, their surroundings, or the environment.

Examples of infectious agents that are transmitted by the contact route include: multidrug-resistant organisms such as MRSA, VRE and MRGN; organisms causing gastroenteritis such as *Clostridioides difficile*, norovirus and contagious skin infections such as impetigo and scabies.

2.3.2 Droplet transmission

This form of transmission occurs when droplets containing infectious micro-organisms come in contact with the eyes, nose or mouth of a susceptible person.

Droplets are generated during coughing, sneezing, talking, and during the performance of certain aerosolgenerating procedures (AGP), such as airway suctioning and bronchoscopy. Droplet distribution is limited by the force of expulsion, gravity and humidity and requires the susceptible person to be in close proximity, usually within a distance of one metre or less. Examples of infectious agents that are transmitted via droplets include influenza virus and whooping cough.

2.3.3 Airborne transmission

Airborne transmission occurs by dissemination in the air of tiny droplet nuclei or dust particles containing the infectious agent, over a distance greater than one metre. Aerosols containing infectious agents can be dispersed over long distances by air currents and inhaled by susceptible individuals who have not had any direct contact with the infectious person. Examples of infectious agents that are transmitted via the airborne route include measles, chickenpox and tuberculosis (TB).

2.3.4 Common vehicle transmission

This form of transmission occurs when the same infectious agent is transmitted to a number of people by a common contaminated source, e.g. food, water, drugs, or blood.

2.3.5 Vector borne transmission

This form of transmission occurs when an animal, usually an insect, transmits micro-organisms to a human host (e.g. mosquitoes, fleas and ticks).

2.4 Principles of infection prevention and control

The objective of good infection control practice is to prevent or reduce the risk of transmission of infectious agents between patients, visitors and healthcare workers through the application of a set of procedures known as standard and transmission-based precautions. This two-tiered approach is designed to provide a high level of protection to all people within the facility. Standard and transmission-based precautions take into account the way infections are spread and the potential sources of infectious agents.

2.4.1 Standard precautions

Standard precautions are work practices required to achieve a basic level of infection control and are recommended for the treatment and care of all patients. They are primarily designed to prevent and minimise the transmission of infectious agents contained in blood and body fluids to workers and other patients.

The basic measures included in standard precautions include:

- ensuring appropriate hand hygiene technique is used as per the World Health Organization's "Five Moments for Hand Hygiene"
- > applying items of personal protective equipment (gown, apron, mask, eye protection and gloves) according to risk and the task that is being undertaken
- > appropriate handling and disposal of sharps, waste and linen
- > routine management of environmental cleaning and reprocessing of reusable equipment and instruments
- > cleaning of shared re-usable patient equipment (e.g. blood pressure cuffs, oxymeter probes, slings, etc.) between use on different patients.

2.4.2 Transmission-based precautions

Transmission-based precautions are additional precautions used in situations where standard precautions alone may be insufficient to prevent infection. These extra precautions are applied according to the transmission route of the infecting agent, and may include the following:

- > isolation of a patient in a room with or without negative pressure ventilation
- > enhanced cleaning of the environment with detergent and disinfectant whilst the patient is in care and when the room is vacated (i.e. discharge clean).

Transmission-based precautions are applied when there are suspected or confirmed "cases" of infectious diseases such as *Clostridioides difficile*, multidrug-resistant organisms (e.g. MRSA, VRE, MRGN), infectious gastroenteritis and infectious respiratory diseases. This is not a complete list of all infectious diseases requiring transmission-based precautions. For further information refer to the SA Health Infection Control Management of Infectious Diseases summary table available on the SA Health website at www.sahealth.sa.gov.au/infectionprevention.

The local infection prevention and control coordinators or nursing unit manager may require additional measures to be undertaken depending on the situation at hand, e.g. during the course of an outbreak of illness amongst several patients and/or staff.

3 Staff health – protecting yourself and others

Common infections such as colds, influenza, gastroenteritis and other serious infections, can be transmitted to patients and healthcare workers via contact, droplet or airborne routes. This chapter provides basic information that can be employed to protect healthcare workers (and other patients) while undertaking routine cleaning duties. All healthcare facilities should have policies and procedures in place which support good hygiene practices.

3.1 Hand hygiene

The most common way micro-organisms are spread between patients and workers in healthcare settings is via the hands. Hand hygiene is therefore one of the most important and effective measures that can be undertaken to prevent the spread of infection. Wearing gloves does not replace the requirement for hand hygiene, since gloves can become contaminated with micro-organisms just as easily as hands.

The term 'hand hygiene' refers to the process of hand washing using soap and water or decontamination using alcohol-based hand rub (ABHR).

Hand hygiene technique should be reviewed if skin irritation occurs and the work health and safety representative/coordinator consulted to discuss use of an alternate product if necessary.

For further information about hand hygiene requirements please refer to:

- > SA Health Hand Hygiene Policy Directive
- > <u>SA Health Hand Hygiene Clinical Guideline.</u>

The following aspects should be considered regarding hand hygiene

Step 1: WHEN

The first step is staff should ascertain when they need to perform hand hygiene. All healthcare workers should be aware of and actively practice basic hygiene principles such as washing hands before: starting work, eating, drinking and after: coughing, sneezing, using the toilet etc. There are also times where hand hygiene must be performed by all health care staff. These are referred to as the "5 Moments" (see Appendix 1: When to wash your hands?).

Step 2: WHICH

Once staff have determined that they are required to perform hand hygiene, the second step is trying to decide which hand hygiene technique to use – i.e. hand wash with soap and water OR use alcohol-based hand rub/gel?

Although alcohol rub is a quick and easy way to clean hands, it does not remove dirt. There are times when hands must be washed with soap and water. They include:

- > when hands are visibly dirty
- > when ungloved hands have come in contact with body fluids such as vomit, faeces, blood etc.
- > when directed by nursing and infection control staff.

Step 3: HOW

The third and final step is to ensure that staff know how to perform hand hygiene effectively.

Hand washing technique

- > ensure all skin surfaces are accessible (i.e. keep hand jewellery to a minimum)
- > ensure nails are clean and short
- > wet hands with running water
- > lather hands with the recommended quantity of plain soap or skin cleansers
- > rub hands together for 15-20 seconds, covering all surfaces
- > rinse under running water
- > thoroughly pat dry hands with a fresh paper towel.

Note: It is advised that an emollient hand cream should be applied regularly, such as after washing hands, before a break and when going off duty.

ABHR technique

- > ensure hands are visibly clean and dry
- > apply enough product to cover all surfaces of the hands and ensure that fingernails are included (i.e. usually one squirt or 1-3mls should suffice)
- rub hands together to spread product to cover all surfaces of hands, fingers and thumbs. Continue to rub for 20-30 seconds or until dry.



3.2 Cough etiquette

Cough etiquette should be applied as a standard infection control precaution at all times. Covering sneezes and coughs limits infected persons from dispersing secretions into the air.

Helpful tips on how to perform cough etiquette:

- > cover the nose and mouth with disposable tissue when coughing, or sneezing
- > dispose of tissues in the nearest waste receptacle or bin after use
- > if no tissues are available, cough or sneeze into the inner elbow rather than the hand
- > if you accidentally cough or sneeze into your hand, wash them or use ABHR as soon as practicable
- > remember to turn away from other people when you cough or sneeze.

For further information about cough etiquette requirements please refer to:

SA Health "Wash Wipe Cover – don't infect another!" resources available at: www.sahealth.sa.gov.au/washwipecover.

3.3 Personal protective equipment (PPE)

PPE refers to a variety of protective clothing and items used alone or in combination to protect healthcare workers from contact with micro-organisms and chemicals. There are three types of PPE that cleaning staff may need to use during the course of their routine activities. They include:

- > gowns or apron
- > masks
- > eye protection (e.g. goggles, face shield)
- > gloves.

Note: cleaning staff should be trained in the proper application of PPE.

3.3.1 Gowns and aprons

Generally speaking, these forms of PPE are not required for staff undertaking routine cleaning activities with the exception of the following circumstances:

- > usage of certain chemicals where the SDS suggest the use of gowns/aprons in order to prevent chemical exposure to the user; or
- upon entering the room of a patient requiring transmission-based precautions (i.e. isolation rooms for patients on contact, droplet and airborne precautions); or
- > where there is a risk of contamination with blood, body fluids, secretions or excretions.

If a gown or apron is required to be put on, then it should be fluid-resistant and it must be changed between patients, rooms and tasks.

3.3.2 Eye protection, masks and face shields

This type of PPE is generally not required for routine cleaning activities, however it may be necessary when:

- > cleaning in isolation rooms
- > handling concentrated chemicals
- > cleaning environments which require transmission-based precautions
- > preparing dilutions when automatic dispensing systems are not in place.

3.3.3 Gloves

Prolonged wearing of gloves can increase the risk of irritant contact dermatitis from sweat and moisture within the glove. Glove usage should therefore be limited to when there is a risk of contact with blood, body fluids, secretions, excretions or equipment that may be contaminated with these fluids and for protection against harsh chemical fluids. Examples include:

- > cleaning toilets and bathrooms
- > cleaning up spillages such as blood, vomit and faeces
- > when cleaning environments which require transmission-based precautions.

When gloves are worn:

- > perform hand hygiene before putting on and after taking off gloves
- > remove gloves immediately after the activity for which they were used (i.e. do not walk around the ward with gloves on as there is potential to spread micro-organisms around the ward)
- > discard disposable gloves after use (do not wash or reuse them)
- > wash reusable gloves (i.e. utility gloves) allow to dry and store in between use
- > replace gloves when they are showing signs of deterioration
- > put on gloves last when gloves are worn in combination with other PPE.

Choosing the right type of gloves for cleaning duties

It is important to assess and select the most appropriate glove for the activity about to be performed. Selection of gloves should be based on a risk analysis of the type of setting, the task that is to be performed, likelihood of exposure to body fluids, length of use and amount of stress on the glove. The glove requirements identified in the safety data sheet (SDS) of any chemicals used for cleaning purposes must also be followed. In general, utility gloves are recommended when using chemical disinfectants.

Notes

- > All staff should refer to warnings and advice on SDS which should be readily available. Staff should receive the necessary training to be able to use chemicals safely.
- > High filtration (P2/N95) masks are required when cleaning in a room where airborne precautions are in place, e.g. for TB, measles or chickenpox.
- > PPE, when worn, must be removed in a manner that will not contaminate the wearer and must be removed and discarded immediately after the task has been completed. If a mask has been worn when cleaning an isolation room, this should be removed last. Hand hygiene must be performed after removal of PPE.

3.4 Preventing sharps injuries

Sharps are devices that are capable of causing a cut or a puncture wound, some examples of sharps include needles, blades and glass.

In most cases, cleaning staff will not need to handle sharps, however please consider the following points or refer to your own healthcare facility policy regarding sharps management:

- > take the sharps container to the needle/syringe
- > never re-cap a needle or syringe
- > ideally, use tongs or similar implement, to pick up the needle and syringe
- > if no implement is available, put on gloves and carefully pick up the needle and syringe with the needle furthest away from your fingers and body
- > carefully place the needle/syringe into the sharps container
- > report the incident to your supervisor or manager as soon as possible.





3.5 Waste and linen

When handling waste, healthcare facilities should:

- > apply standard precautions to protect against exposure to blood and body fluids during handling of waste
- ensure waste is contained in an appropriate receptacle (i.e. identified by colour and label) and disposed of according to the facility waste management plan
- > ensure healthcare workers are trained in the correct procedures for waste handling.

All used linen should be handled with care to avoid dispersal of micro-organisms into the environment and to avoid contact with staff clothing. The following principles apply for linen used throughout the healthcare facility (i.e. irrespective of whether transmission-based precautions apply or not):

- > wear appropriate PPE
- > ensure used linen is 'bagged' at the location of use and placed directly into an appropriate laundry receptacle (e.g. used linen should never be placed on the floor)
- > ensure linen bags are not over filled (e.g bags must be less than 3/4 full)
- > place linen heavily soiled with body fluids into leak-proof laundry bags for safe transport
- > perform hand hygiene after handling used linen.

Healthcare facilities should have documented policies on the collection, transport and storage of waste and linen. Those facilities that process or launder their own linen should also have documented operating policies consistent with the *Australian/New Zealand Standard AS/NZS 4146:2000* – Laundry Practice.

3.6 Illness policy

All healthcare settings should establish a clear expectation that staff do not come into work when acutely ill with a probable infection (e.g., fever, cough, flu-like symptoms, diarrhoea, vomiting). This expectation should be supported with policies and procedures which are aligned to the exclusion periods for healthcare workers as prescribed in the *Australian Guidelines for the Prevention and Control of Infection in Healthcare* 2019.

3.7 Accidental exposure

All healthcare facilities should establish written policies and procedures for the evaluation of staff (employees and contract workers) that are, or may be exposed to blood or body fluids and other infectious hazards that include:

- > a sharps injury prevention program
- > timely post-exposure follow up and prophylaxis when indicated
- > a respiratory protection program if staff are entering an airborne infection isolation room.
- review and reporting of exposures to work health and safety staff and/or Infection Prevention and Control Coordinators.

3.8 Staff immunisation

Certain occupations, particularly healthcare workers are associated with an increased risk of some vaccine preventable diseases. Furthermore, healthcare workers, including cleaning staff, may transmit community acquired infections to susceptible patients and their co-workers. In order to protect healthcare workers from vaccine-preventable diseases they should be provided with access to appropriate vaccination programs. However, the likelihood of contact with patients and/or blood or body fluids determines vaccination recommendations.

Further information is provided in the following:

> SA Health Immunisation for Health Care Workers and Quarantine Workers Policy 2021

4 Cleaning chemicals, equipment and technique

The role of environmental cleaning is to reduce the number of infectious agents that may be present on surfaces and minimise the risk of transfer of micro-organisms from one person/object to another, thereby reducing the risk of infection.

Cleaning is a process which intends to remove foreign material (e.g. dust, soil, blood, secretions, excretions and micro-organisms) from a surface or an object through the use of water, detergent and mechanical action/ friction. Although cleaning is known to successfully reduce the microbial load on surfaces there are some circumstances where disinfection is also required to be performed.

Disinfection is a process which intends to kill or remove pathogenic micro-organisms but which cannot usually kill bacterial spores. Some elements such as toilets, bidets and commodes must always be cleaned with detergent and disinfectant as a part of standard precautions. However there are some situations where the cleaning of all elements is upgraded to detergent and disinfectant as a means of minimising the risk of transmission of disease between patients. This is referred to as transmission-based precautions.

There are three important factors which together help ensure the cleaning and disinfection practices within the healthcare facility are of a high standard. These include: chemicals, equipment and techniques. All cleaning services staff should be aware of the importance of each factor and how they interrelate. For example, if the cleaning chemicals that are used in the facility are adequate for the purpose, but cleaning equipment is dirty (e.g. unclean mops or buckets) or the cleaning technique is poor, then the cleaning/disinfection of the area will be sub-standard. This chapter contains information about these three important factors.



4.1 Cleaning chemicals

There are two main groups of cleaning chemicals that are to be used in the healthcare facility:

- Detergents: A detergent is a surfactant that facilitates the removal of dirt and organic matter. Most hard surfaces can be adequately cleaned with warm water and a neutral detergent as per the manufacturer's instructions. Allowing the cleaned surfaces to dry is an important aspect of cleaning.
- Disinfectants: A disinfectant is a chemical agent that rapidly kills or inactivates most infectious agents. Disinfectants are not to be used as general cleaning agents, unless combined with a detergent as a combination cleaning agent (detergent-disinfectant).

4.1.1 Disinfectants

Disinfectants that are used for cleaning purposes within a healthcare setting must be either:

- > a TGA approved hospital-grade disinfectant, preferably with label claims against specific organisms, or
- > a chlorine-based product such as sodium hypochlorite.

Some items of equipment, particularly electronic equipment such as monitors and keyboards may be damaged by the use of certain chemical disinfectants, and the manufacturer's instructions should always be consulted prior to selecting a disinfectant for these items. The use of wipe-able keyboard covers or fully washable type keyboards should be considered.

When cleaning or disinfecting hard surfaces such as floors, compatibility of the agent with the material of the surface must be considered. Studies have shown that the use of disinfectant on floors offers no additional advantage over routine detergent and water cleaning. Additionally, newly cleaned floors become rapidly recontaminated from shoes, equipment wheels, dust etc. There is minimal risk to a patient from micro-organisms located on floors. (CDC, Reduce Risk from Surfaces: 2020).

4.1.2 Chemical application

When selecting a disinfectant there are two different types of systems to choose from defined as follows:

- 2-step clean which involves a physical clean using detergent solution followed by use of a chemical disinfectant
- > 2-in-1 clean in which a combined detergent/disinfectant solution or wipe is used and mechanical/manual cleaning action is involved.

Care should be taken to ensure that the cleaning chemical is used appropriately and in accordance with the manufacturer's specifications. For example, certain chemicals, particularly chlorine-based disinfectants, may need to be rinsed off with water after the disinfectant contact time has been achieved. In these cases, the cleaning process will require an additional step to those specified above.

4.1.3 Chemical claims

All claims regarding the efficacy of a chemical should be carefully assessed and if necessary clarified. For example, a product may claim to kill *Clostridioides difficile* and be referring to the vegetative cells, not the spores. Vegetative cells are readily killed by most disinfectants, however spores are not. Cleaning and disinfecting agents should be reviewed and approved by Infection Prevention and Control Coordinators to assure the chemicals are effective for their intended use.

4.1.4 Chemical concentration

One of the most important aspects regarding the effectiveness of a disinfectant is to ensure that the concentration of the cleaning solution is correct and in accordance with the manufacturer's specifications. Using a solution that is too weak will not reliably kill micro-organisms on the surface. Using a solution that is more concentrated than specified is not cost effective, may be detrimental to the life of fixtures and fittings and may be a work health and safety risk.

4.1.5 Contact time

Contact time refers to the amount of time necessary for the disinfectant to be in contact with the surface to inactivate micro-organisms. Staff should always adhere to the manufacturer's specifications regarding contact time to ensure maximal disinfection effectiveness.

4.1.6 Other factors affecting the chemical effectiveness.

Cleaning solutions will become contaminated during use, and continued use of a contaminated solution may transfer micro-organisms to each subsequent surface being cleaned. Therefore, cleaning solutions should be regularly replaced in accordance with the manufacturer's specifications and more frequently when cleaning heavily contaminated areas, when solutions appear visibly dirty and immediately after cleaning blood and body fluid spills.



4.2 Cleaning equipment

In general, all cleaning equipment used in healthcare facilities should be fit for purpose, cleaned and stored dry between use, well maintained and used appropriately. Other factors regarding cleaning equipment are discussed below.

4.2.1 Dust control

Equipment which generates and disperses dust such as feather dusters and brooms should not be used within the healthcare facility. Vacuums which are used to clean carpets close to clinical areas should be fitted with high-efficiency particulate air (HEPA) filters and undergo regular maintenance, which includes changing the filters on a regular basis (i.e. included in a scheduled maintenance program).

4.2.2 Aerosols

The use of spray bottles or equipment that might generate aerosols during usage should be avoided. Chemicals in aerosols may cause irritation to eyes and mucous membranes. Containers that dispense liquid such as 'squeeze bottles' can be used to apply detergent/disinfectants directly to surfaces or to cleaning cloths with minimal aerosol generation.

4.2.3 Cleaning cloths (excluding microfibre type)

Cleaning cloths and buckets containing cleaning solution are the main materials that are used for cleaning of surfaces in healthcare facilities. Care needs to be taken to ensure that cleaning cloths are suitable for purpose, that there is sufficient quantity for staff to undertake their duties effectively and that they are used appropriately to prevent cross contamination of surfaces (refer to sub-section 4.3 Cleaning Techniques).

If a healthcare facility is choosing to use reusable cleaning cloths, a system should be developed that ensures that a clean cloth(s) is used for each patient area (single room, shared room, bay). Failure to do so could compromise the effectiveness of the cleaning process. The cloths should be laundered after each day's use and in accordance with the *Australian/New Zealand Standard AS/NZS 4146:2000* – Laundry practice. However, facilities may also consider using disposable cloths instead, especially for wet areas where the contamination may be higher.

4.2.4 Microfibre cleaning cloths/mops

The microfibre cloth technology is based on tiny charged fibres which allow dirt particles to cling to the cloth by electrostatic attraction, and this enables easier cleaning of difficult to reach areas. The material is strong and able to withstand repeated laundering. However they are only compatible with a limited number of chemical cleaning products. If using this system, cloths should only be used in a manner that prevents potential spread of micro-organisms from one patient area to another and cleaning staff will require additional training in their use.

4.2.5 Detergent and/or disinfectant-impregnated wipes

These wipes are useful for decontaminating small items of patient care equipment or high touch surfaces, particularly in clinical outpatient areas, e.g. radiology. They should not be used for cleaning large surface areas since they do not generally contain enough product to cover large areas, and many wipes would be required for effective decontamination.

4.2.6 Colour coded cleaning materials and equipment

There is no Department for Health and Wellbeing requirement for South Australia healthcare facilities to introduce a colour coding system for cleaning materials and equipment; however some facilities may consider doing this voluntarily.

In essence, the colour coding system helps to ensure that materials and equipment used for cleaning purposes are not used in multiple different areas, therefore reducing the risk of cross-infection. If choosing to implement this system, all cleaning materials and equipment, for example, cloths (re-usable and disposable), mops, buckets, aprons and gloves, should be given a specific colour code. For example, United Kingdom hospitals and NSW Health hospitals have implemented this system and all materials and equipment are colour coded for the areas specified below:

Red:	Bathrooms, washrooms, showers, toilets, basins and bathroom floors
Blue:	General areas including wards, departments, offices and basins in public areas
Green:	Catering departments, ward kitchen areas and patient food service at ward level
Yellow:	Isolation areas

If introducing this type of system, the method used to colour code items should be clear and permanent, and policies and procedures should be in place to ensure all staff are aware of the mechanics of the system. Further information and guidance can be obtained from:

> NSW colour coding chart: https://www.cec.health.nsw.gov.au/__data/assets/pdf_file/0005/258656/colour_coding_chart_2012.pdf

4.2.7 General maintenance of cleaning equipment

Cleaning equipment (including buckets, mop heads etc.) should be inspected regularly and changed when required. The following basic principles should be followed:

- > equipment such as buckets and containers should be washed with detergent and disinfectant after each use and stored upside down and allowed to dry between use
- > buckets and containers should be inspected for cracks and replaced accordingly
- > mop heads and cleaning cloths should be changed and laundered daily or after use (if used less frequently than daily) and changed when visibly soiled
- > equipment such as cloths and mop heads which are used to clean blood or body fluid spills or used in isolation rooms should either be disposable and discarded after use, or if re-usable, changed immediately after use and placed in a plastic bag for transport to the laundry.

4.3 Cleaning techniques

Incorrect or inappropriate cleaning techniques may spread micro-organisms around rather than removing them from the surface. The following points should form the basis of all standard operating procedures regarding cleaning in healthcare facilities:

- > The flow of cleaning should be from areas which are considered relatively clean to dirty. This means that areas/elements which are low touch or lightly soiled should be cleaned before areas/elements which are considered high touch or heavily soiled. For example:
 - when cleaning a bathroom, the toilet should be cleaned last as it is likely to be the most contaminated element in that area
 - in a patient room, items that would be considered high touch would include the patient bed, call-bell, locker, overway table, light switches, control knobs, hand basin etc., and low touch areas would include the walls, windows and floors.
- > The flow of cleaning should generally be from high to low reach surfaces. For example:
 - when dusting horizontal surfaces in a patient room, high areas such as those above shoulder height should be done first followed by all other elements. Dusting technique should not disperse the dust, (i.e. use damp cloths).
- > When using cloths and bucket/solution system to clean:
 - avoid 'double-dipping' used cloths into the bucket containing clean, unused cloths. Doing this can
 contaminate the remaining clean cloths which are in the solution and result in spreading micro-organisms
 to surfaces that are wiped thereafter
 - to maximise the use of cleaning cloths, they should be folded and rotated in a manner so as all surface areas of the cloth, including the front and back, are used progressively as elements are cleaned
 - more cloths may be required to clean 'high-touch surfaces' compared to the same surface area of 'low-touch surfaces'.

- > With the above points taken into consideration, cleaning of an area should then be performed in a methodical way by either using a clockwise or counter-clockwise approach or a checklist for guidance.
- > Upon completion, the whole area should be visually checked to ensure the area is thoroughly cleaned and that elements have not been missed.
- > All elements which are broken or deteriorated to a point where cleaning is compromised should be reported and scheduled for replacement/maintenance as necessary.

Samples of the following cleaning techniques can be found in:

- > Appendix 2: Sample of the general cleaning practices
- > Appendix 3: Sample of the discharge cleaning procedure
- > Appendix 4: Management of blood and body substance spills.

The information presented in these Appendices are a general guide and do not replace established policies and procedures that a facility may have in place regarding environmental cleaning.

Useful resources in the development of specific cleaning procedures are:

- > NSW Health (2012) Environmental Cleaning Standard Operating Procedures, available at
 - <u>https://www.cec.health.nsw.gov.au/keep-patients-safe/infection-prevention-and-control/cleaning-and-reprocessing</u>
 - http://www.cec.health.nsw.gov.au/__data/assets/pdf_file/0005/258665/ecsop-module-3-overview.pdf

4.4 Emerging Environmental Cleaning Technologies

In recent years, there have been multiple emerging environmental cleaning techniques which have become commercially available. An emerging cleaning technology refers to new devices or products (automatic or manually controlled) that clean the environment and/or equipment surfaces.

Further information can be found in the Australian Commission on Safety and Quality in Health Care (ACSQHC) Environmental cleaning: Emerging environmental cleaning technologies fact sheet, <u>https://www.safetyandquality.gov.au/publications-and-resources/resource-library/environmental-cleaning-emerging-environmental-cleaning-technologies</u>

5 The cleaning schedule

As micro-organisms are invisible to the naked eye, a surface can appear visibly clean while covered with many micro-organisms that can spread to other patients and potentially cause infection. All surfaces should therefore be cleaned regularly even if the element appears to be visibly clean. However there are several factors that need to be taken into consideration in determining the cleaning schedule (i.e. cleaning frequency and method) and they include the risk classification of functional areas and the risk associated with the individual element.

5.1 Functional areas

A functional area refers to an area within the facility in which cleaning occurs, for example, intensive care unit (ICU), operating theatre, general ward, cafeteria etc.

Where bathrooms, corridors, storerooms, stock rooms, meeting rooms, offices, and lounge rooms etc. provide direct open access into the functional area, these areas must receive the same level of cleaning as the functional area itself.

5.1.1 How was the risk classification of functional areas determined?

The risk classification of functional areas has been based upon the risk model outlined in the *Canadian Best Practices for Environmental Cleaning for Prevention & Control of Infections* 2009, with modifications made based upon the advice received from the Cleaning Standard Working Group (2010).

In summary, each functional area is given a score based on the probability of contamination; vulnerability of the patients to infection; and potential for exposure. A total score for the functional area is determined and cross referenced with a risk matrix which determines the risk classification of "high", "moderate" or "low" risk. In general, the higher the risk classification of a functional area, the more frequent cleaning needs to occur. For example, an ICU (high risk) will be cleaned more frequently than a general ward (moderate risk) or office area (low risk). A summary of the risk classification of functional areas is presented in the table on the following page. More comprehensive information regarding the determinations of the risk classification of functional area is presented in Appendices 5 and 6.

Note: in the event that there is an outbreak within any functional area, the risk classification is temporarily upgraded to "very high risk" irrespective of the usual score of the functional area. This risk status is maintained until the outbreak has been resolved and downgraded. Any decision to intensify cleaning during an outbreak situation is made in consultation with the facility's Infection Prevention and Control Coordinators. The increased frequencies prescribed in the Schedule are indicative only, and may be varied depending on the causative organism and its mode of transmission.

Summary of risk classification of functional areas within a healthcare facility (see Appendices 5 and 6 for more information on the determinations)					
Very High Risk	High Risk	Moderate Risk	Low Risk		
> Outbreak situation*	 > Intensive care unit > High dependency unit > Operating rooms, recovery, burns unit > Renal & haemodialysis units > Emergency department > Transplant, haematology & oncology units (including neutropenic patients) > Invasive procedure rooms 	 > Labour & birthing unit > Autopsy/morgue > Equipment reprocessing & sterilisation area > General wards > Treatment/procedure rooms: e.g. podiatry, optical, general dental > Pharmacy - admixture room & general purpose area > High use public areas e.g. outpatients > Laundry (soiled) 	 > Laundry (clean linen) > Long term care areas > Non-invasive procedure rooms > Plant room, engineering, records storage > Low use public areas (e.g. administration, meeting rooms etc.) > Sterile supply areas 		

* Note: all functional areas can be temporarily upgraded to "very high risk" in the event of an outbreak within the functional area.

5.1.2 Amending the risk classification of functional areas

Healthcare facilities may increase the risk status of a particular functional area if patients in that area are considered to be at increased risk (e.g. a moderate risk functional area can be re-classified as high risk), however, no functional area should have its weighting reduced (e.g. a high risk functional area cannot be reclassified as a moderate or low risk) unless there is a substantial change in the patient mix or service level. Any changes to risk status should be made in consultation with clinical management (e.g. Director of Nursing), local infection control staff (where available) or Department for Health and Wellbeing Infection Control Service.

5.1.3 New functional areas

For functional areas that have not been listed in the cleaning schedule, a risk based approach will need to be used in determining the cleaning frequency and method. Factors to consider are: probability of contamination, vulnerability of patients to infection and potential for exposure (see Appendices 5 and 6). Healthcare facilities requiring a new functional area should consult with clinical management (e.g. Director of Nursing), local infection control staff (where available) or Department for Health and Wellbeing Infection Control Service to determine the risk status.

5.2 Elements

An element refers to an item such as a surface, article, fixture or fitting to be cleaned, for example: patient beds, lockers, blood pressure cuffs, walls, toilets, bidets. Note that not all of these items are the responsibility of cleaning staff; cleaning of shared patient equipment such as dressing trolleys, intravenous (IV) drip stands and diagnostic equipment is normally the responsibility of the nursing staff, and these items have been grouped together in a separate section of the Schedule.

5.2.1 How was the cleaning frequency and method determined for each element?

The frequency and method that has been prescribed in this Schedule is based upon the *Australian Guidelines for the Prevention and Control of Infection in Healthcare* 2019, with modifications made based upon the advice received from the Cleaning Standard Working Group (2010). In essence the:-

- Cleaning frequency for each element is based upon the notion that all surfaces can be divided into two groups – those with minimal hand-contact (e.g. floors, walls, ceilings) and those with frequent hand-contact ("high-touch surfaces"). High-touch surfaces in patient care and procedural areas, such as doorknobs, bedrails, light switches, etc., should be cleaned more frequently than surfaces with minimal hand contact. During an outbreak situation, the cleaning frequency will need to be increased even further and is outlined in the cleaning schedule.
- Cleaning method for each element is based on the notion that some elements may be more contaminated than others (both in number and type of micro-organisms). For example all elements within wet areas (i.e. toilets, showers, bidets) must always be cleaned with detergent AND disinfectant whereas elements such as patient bed rails, overways and lockers need only be cleaned routinely with detergent (except when transmission-based precautions are in place or during outbreak situations).

5.2.2 Amending the cleaning frequency of elements

Healthcare facilities may need to increase the frequency of cleaning of particular elements from time to time. Examples include, but are not limited to, circumstances where elements have a higher than normal usage or when capital works are occurring in the functional area which may increase dust contamination.

No element should have its frequency reduced below the prescribed level unless there is sufficient evidence to suggest that an alternate mode of compliance achieves the same outcome. For example, bed curtains can be cleaned or changed less frequently if antimicrobial curtains are used, and staff should refer to local policies, procedures and manufacturer's instructions. Any changes to cleaning frequency should be made in consultation with clinical management (e.g. Director of Nursing), local infection control staff (where available) or Department for Health and Wellbeing Infection Control Service.

5.2.3 Amending the cleaning method of elements

Healthcare facilities may choose to intensify their cleaning method (i.e. from detergent only to detergent and disinfectant) however the recommended cleaning method in this Schedule should not be downgraded (i.e. from detergent and disinfectant to detergent only) without supporting evidence that the risk reduction can be achieved by other means.

5.2.4 New elements

For elements that have not been listed in the cleaning schedule, a risk-based approach will need to be used in setting the cleaning frequency and method by taking into consideration both the risk of contamination and the risk to patients. Healthcare facilities requiring new elements should consult with clinical management (e.g. Director of Nursing), local infection control staff (where available) or Department for Health and Wellbeing Infection Control Service to determine the appropriate cleaning frequencies/method.

5.3 The cleaning schedule

The cleaning schedule contains a comprehensive list of functional areas and elements encountered within the majority of healthcare settings. Not all of these listed items will be applicable to every setting. There may also be areas in specific settings that are not covered in the Schedule. In these circumstances, the area should be risk assessed using Appendix 5: Risk matrix and classification of functional areas supporting information.

The prescribed cleaning schedule is presented in Appendix 7: Cleaning schedule. In summary, the different types of cleans that healthcare facilities are required to undertake include;

- Standard clean: is the minimum scheduled cleaning that is required to be conducted on an ongoing basis irrespective of the perceived cleanliness of the element (for example, even if the floor in a ward appears visibly clean, it still is required to be cleaned daily in high and moderate risk functional areas).
- > Transmission-based clean: There are two different types of cleaning that are required to be conducted when there are patients on transmission-based precautions. For example, a confirmed or suspected case of infection or colonisation with a multidrug-resistant organism, infectious respiratory pathogen, infectious gastroenteritis or Clostridioides difficile.
 - Single case(s) This clean applies when there is a single or several un-related case(s) in the functional area. In general, the cleaning frequency remains the same as a standard clean; however the cleaning method is intensified to detergent and disinfectant for most elements in the localised area the case occupies, i.e., isolation room.
 - Outbreak clean is when there is an occurrence of more cases of the same infection than expected in a given area. In general, the cleaning frequency AND method is intensified for the whole functional area. This type of clean supersedes the "standard clean" until the outbreak is downgraded by the local Infection Prevention and Control Coordinators or appropriate delegate.
- Discharge clean: this requires cleaning of specified elements within the immediate patient care area and is required to be conducted after a patient vacates (i.e., is discharged, transferred or deceased) and before the next patient enters the area. This type of cleaning may need to be performed in addition to the 'standard clean'. There are two different types of discharge clean:
 - Standard discharge clean to be conducted after every discharge where the patient has not been on transmission-based precautions
 - Transmission-based discharge clean to be conducted after every discharge where the patient has been on transmission precautions, using detergent and disinfectant, as above.
- Spot and spill clean: to be conducted whenever elements appear visibly soiled or when there is a spillage of body fluid (blood, vomit, urine, faeces etc.). This type of cleaning may need to be performed in addition to the 'standard clean'.

SPOT & SPILL CLEAN To be conducted whenever elements appear visibly unclean or when there is a spillage of blood or body fluids	Cleaning method	The affected area where the "spot or	spill" has occurred must be cleaned as soon as possible. Applying transmission-based precautions if the	spot or spill is blood or body fluid (e.g. blood, urine, faeces etc.) Apply standard precautions for all	other circumstances
DISCHARGE CLEAN To be conducted after a patient is discharged, transferred or deceased and BEFORE a new patient occupies the environment	Cleaning method	Transmission- based precautions – use Detergent AND disinfectant		✓ Applies to selected elements in the LOCALISED area the isolated "case" was occupying	Applies to selected elements for the WHOLE functional area
		Standard Precautions – use detergent	Applies to selected elements only		
STANDARD CLEAN To be conducted on a ongoing basis whilst patients are occupying functional area.	Cleaning method	Transmission- based precautions – use Detergent AND disinfectant		Apply to the LOCALISED area the isolated "case" is occupying only	Apply to the WHOLE functional area
		Standard Precautions – use detergent	>		
	Cleaning frequency	Low risk functional area	All elements	✓ As per "standard clean Above	pgraded to lements for outbreak
		Moderate risk functional area	All elements	✓ As per "standard clean Above	Cleaning frequency is upgraded to "very high risk" for all elements for the duration of the outbreak
		High risk functional area	All elements	✓ As per "standard clean Above	
Type of cleaning			Standard clean (No confirmed or suspected "cases")	A Single case	B Outbreak clean*
				Transmission-based clean (There are confirmed or suspected "cases")	

Summary of types of cleaning and requirements

NOTES

Case(s) = is a patient who has been confirmed/suspected to be colonised or infected with multidrug-resistant organism (MRSA, VRE, MRGN), infectious espiratory pathogen, infectious gastroenteritis, Clostridioides difficile or other pathogen of epidemiological significance.

Isolation = single, unrelated cases^{*}.

Outbreak = An outbreak is defined as (1) occurrence of more cases* of disease than expected in a given area among a specific group of people over a particular period of time; OR (2) two or more linked cases of the same illness.

5.4 Special circumstances

There are circumstances where it may be necessary to deviate from the prescribed cleaning schedule due to the medical condition of the patient. For example, patients who have multiple chemical sensitivities may be adversely affected by environments which are cleaned with regular chemicals.

Another consideration is where aged care facilities are co-located with acute care beds, e.g. in hospitals, the frequency of cleaning or spot cleaning in common areas may need to be increased according to the risk of contamination by body fluids.

In such situations, advice should be sought from clinical management (e.g. Director of Nursing), local infection control staff (where available) or Department for Health and Wellbeing Infection Control Service

Further information regarding multiple chemical sensitivity can be found in the:

> SA Health Idiopathic Environmental Intolerance or Multiple Chemical Sensitivity Policy Guideline, 2016

It must also be noted that where any food handling occurs in the clinical/ward setting i.e. kitchenettes, all chemicals used (detergent and sanitiser) must be food grade and not contain any perfumes.

6 The environmental hygiene program

Achieving good cleaning outcomes is important to minimise the risks associated with poor cleaning, such as cross-infection, patient dissatisfaction, occupational health and safety problems, not meeting accreditation requirements and negative media attention. It is required that healthcare facilities have the following support programs in place to ensure hygiene standards within a facility are of acceptable standard.

6.1 Organisational chart and governance structure

Each healthcare facility will need to have an organisational chart which identifies:

- > functional reporting lines
- > organisation reporting lines
- > the relationship between units within the cleaning service, including the role of any subcontractors
- > details of any other personnel responsibilities.

Irrespective of whether cleaning services are provided in-house or whether an external contractor is engaged, the accountability for all aspects of cleaning and cleaning staff lies with the management, that is, the General Manager or Chief Executive of the healthcare facility. In the event that an external contractor is used to perform cleaning services within the facility, a well-defined relationship, with a delineation of roles and responsibilities between the purchasing health service and the external cleaning provider, is an essential component of any constructive working relationship.

6.2 Facility map

A facility map must be provided outlining a detailed floor plan of all functional areas showing patient care areas, toilets, bathrooms and all other rooms/areas.

6.3 Site specific cleaning schedule

Although the cleaning schedule prescribes the risk classification of functional areas and the minimum cleaning frequency and method that should be adopted, every facility must have a site specific cleaning schedule to ensure it meets (or exceeds) the prescribed standard.

This will assist in making sure that an appropriate level of cleanliness is maintained and elements are not inadvertently missed.

The content of the site specific cleaning schedule must clearly identify:

- > risk status of all functional areas
- > cleaning frequency
- > cleaning method
- > responsible person (i.e. cleaners, nurses, ward assistants, etc.).

The cleaning schedule (or equivalent) must be positioned in an area that is regularly and easily accessible, or alternatively individual sections of the schedule are to be placed in the area concerned. The document should be regularly reviewed and where necessary adjustment made.

In the event that external cleaning contractors are engaged to conduct the cleaning of a healthcare facility, the site specific cleaning schedule must form a part of the contract specification and amendments should be made when necessary.

6.4 Staff skills/knowledge and staff resource levels

6.4.1 Staff skills and knowledge

Cleaning services managers, supervisors and staff must have skills and knowledge in cleaning and hygiene matters appropriate to their work activities. As a minimum, training will need to be given in the performance of all types of cleaning tasks, including: cleaning chemicals, equipment and techniques, infection control, manual handling, fire, health and safety and site orientation.

Training should be completed before new staff members are allowed to work without direct supervision and competency should be assessed every year or sooner if a competency issue has been identified. Training needs to be conducted by a suitably qualified person and records of attendance maintained within the employee's personnel file.

There are many approaches a facility can adopt to provide training to staff that have cleaning-related duties. Some examples are:

- > in-house training
- > distribution of cleaning information
- > use of e-learning modules
- > establishment of internal policies and procedures that provide information about cleaner responsibilities
- > attendance at externally provided courses.

Where an external cleaning contractor employs cleaning staff, the accountability for training needs to be clearly stated in the cleaning contract specification and needs to include the type of person conducting training and education programs or the qualifications needed to be attained by cleaners or cleaning supervisors/managers.

6.4.2 Staff resources

In general, arrangements should be in place to meet peak loads and contingency plans need to be in place in the event of an outbreak, industrial action, utility failure or other events that may cause cleaning services to be compromised. A risk management strategy must provide details of how identified risks will be managed and mitigated.

6.5 Cleaning chemicals and equipment

All cleaning chemicals and equipment used on the site must be fit for purpose and undergo a thorough risk assessment prior to purchase and usage.

In regards to cleaning equipment, all items should be regularly inspected and replaced or repaired when necessary. Where appropriate, all equipment must also have necessary maintenance checks by qualified person(s) in accordance with the manufacturer's specifications (i.e. vacuums and HEPA filters).

Each site must have a:

- > standard operating procedure(s) for the use of environmental cleaning chemicals showing direction of use (e.g. dilutions, water temperature etc.) and disposal
- > documented maintenance schedule for the upkeep of cleaning equipment
- > list of approved chemicals and equipment
- > list of approved chemical suppliers
- > copy of all safety data sheets for chemicals used on the premises.

6.6 Documentation of cleaning techniques

All cleaning techniques must be documented in relevant cleaning policies and standard operating procedures. All cleaning staff should be familiar with the required cleaning techniques and supervisors should regularly monitor cleaning staff adherence to the procedures. (Refer back to sub-section 4.3 Cleaning Techniques).

6.7 Record keeping and registers

Maintaining records enable cleaning staff, supervisors and managers to ensure that all cleaning activities are being completed and in the event that something has been missed, the matter can be rectified without delay. Additionally keeping records allow managers to identify trends in cleaning requirements of the facility and this in turn enables resources to be used more efficiently and effectively.

Types of records cleaning staff may need to keep include:

- > sign off when the task has been completed (i.e. staff to put their initials against a daily work schedule to verify that they have done that task)
- > notes to identify when a task has been unable to be completed and what action has been taken to remedy non-compliance (i.e., cleaners should highlight which tasks were unable to be completed on their daily work schedule and reasons). Their manager/supervisor should review and note what action has been taken to remedy the matter.

Type of records supervisors or contract managers need to keep include:

- > internal verification records (see sub-section 6.8 Internal verification and assessment)
- > complaints that have been received and notes relating to the investigation and outcome.

The healthcare facility may choose to use any method including paper forms, electronic logging, personal digital assistants etc., to maintain records, demonstrate compliance and identify the action taken when compliance has been unable to be achieved. The key with record keeping is to:

- > keep records to a minimum only record information that is required or will be useful
- > make it clear and easy for the recorder
- > develop processes to ensure completed records are collected, reviewed and filed ready for review in a timely manner, and ensure replacement forms are readily and available
- > use accepted/agreed abbreviations where possible.

It is suggested that all records be stored for a period of at least four years.

6.8 Internal verification and assessment

Verification is the gathering and recording of evidence to confirm the effectiveness of the cleaning method and/ or compliance with the Cleaning Standard. Internal verification or assessment can be used to confirm that the hygiene standard is effective, is being followed consistently and that records are being completed. Individual facilities need to determine the complexity and detail required for the internal verification system. The suggested method is to conduct regular internal assessments to measure compliance and effectiveness. Such assessments may include the use of:

- Visual inspection of cleanliness: functional areas are inspected to check the visual cleanliness. The use of the "white-glove technique" may also be used to assess the presence of dust. It is should be noted that micro-organisms are invisible to the naked eye so although a surface may appear clean it may not necessarily be the case. (Refer to sub-section 7.1 Internal Audits).
- > **Visual assessment of cleaning technique:** supervisors review cleaning techniques of the cleaning staff to ensure they are in accordance with documented policies and procedures.
- Fluorescent markers: high touch surfaces are marked with a fluorescent marker before cleaning occurs. A "black" light (i.e. ultraviolet (UV)) is then used after cleaning has been completed to assess whether the marker has been removed and hence the surface adequately cleaned.
- > **ATP testing methods:** these are commercial systems designed to test for residual organic matter on surfaces, and are commonly used in the food industry.
- Microbiological tests: routine microbiological sampling of the environment to determine the effectiveness of cleaning has considerable limitations and is not generally recommended. However, microbiological testing can be used as part of outbreak management investigations. It can also be used as a method of validation of the cleaning system using a proposed standard. (see Dancer, S J., 2004)

More information about the above methods and their application can be found in *Mitchell et al*, Hospital Infection, March 2013.

If any of the above verification strategies are utilised all corresponding records (i.e., checklists, reports etc.) must be maintained in a central location.



7 Audit system

In order to demonstrate compliance with this Cleaning Standard and fulfil accreditation requirements, healthcare facilities are required to develop a documented audit system that consists of both an internal and external component. The essential elements of each component are described below.

7.1 Internal audits

Healthcare facilities require a continuous comprehensive approach to measuring cleaning outcomes. Internal audits must be performed in all functional areas across all risk categories. This systematic program of internal auditing (including results achieved) must be clearly documented. An internal audit template that outlines the basic requirements for auditing, including specified cleaning outcomes for audit compliance can be found in Appendix 8: Audit tool. This template can be modified to suit the individual needs of facilities; however the core functional areas, the acceptable quality level and frequency must not be changed.

Cleaning audit scores must be equal to or higher than the specified acceptable quality level for each functional area. The frequency of auditing each functional area depends on the risk category allocated to that area. Table 2 provides the specified frequency and acceptable quality level for each risk category.

Functional area risk category	Required frequency of auditing	Acceptable quality level
High	Over a period of one month 50% of rooms in every high risk area are audited once	90%
Moderate	Over a period of three months 50% of rooms in every moderate risk area are audited once	85%
Low	Over a period of 12 months 100% of rooms in every low risk area are audited once	85%

Table 2: Audit frequency for risk categories

Internal audits should be undertaken by a person who has a thorough knowledge of the cleaning standard and the cleaning processes required by a healthcare facility. An auditor should possess the communication, numeracy and analytical skills required to conduct an audit. An auditor can be a member of the cleaning service, an employee of the facility not related to the cleaning service or area being audited, or an employee of the external service provider. An auditor should always be accompanied by a staff member of the area being audited, (such as the department manager), to ensure issues are identified, ratified and validated for the area.

The cleaning staff should also be engaged in the audit result review process so that they may understand any areas of non-compliance and, where relevant, their role in rectifying these.

Feedback must be provided to the individual areas including a copy of the audit score sheet along with clear identification of areas requiring action. Results of audits, together with quality improvement plans and outcomes (to rectify any highlighted problems), must be tabled with the healthcare facility's appropriate governance committee and the relevant Infection Prevention and Control Committee.

For high and moderate risk areas, while at least 50% of the rooms within a functional area are to be audited over the frequency period, the other 50% of the rooms are to be audited in the following audit period. The auditor must always refer to the previous audit to understand what sections were audited, identify any previous actions and to know what sections are required to be audited.

7.2 External audits

In addition to internal audits it is recommended that facilities undertake an external audit at a minimum every two years, conducted by a qualified auditor not employed by the healthcare facility or cleaning provider. The external auditor may be a person within SA Health, employed at another facility within the local health network or a person from a third party external agency. Refer to Appendix 9: Audit tool.

Qualified auditors should have appropriate communication and interpersonal skills including cultural sensitivity, conflict resolution and problem solving skills. Auditors should also possess organisational, planning and time management skills as well as the observation, analytical, numeracy and technology skills needed to conduct and report on auditing activities.

Qualified auditors should also have adequate skills and knowledge in the following areas:

- 1. Technical competence in the hazards and risks of infection prevention and control
- 2. Knowledge of the Cleaning Standard for Healthcare Facility requirements
- 3. Familiarity with audit principles, procedures and techniques.

The external cleaning audit should review the healthcare facility's environmental hygiene program (refer to Chapter 6: The environmental hygiene program), including skills and knowledge, all policies related to cleaning and auditing, the internal audit program, all the audit results, variance results and action plans. The scope should include all functions performed by nurses, cleaners, cleaning contractors and facility management contained within this standard.

Reporting and feedback must be provided back to the healthcare facility (including audit evidence and clear identification of areas requiring action) and be tabled with the healthcare facility's appropriate governance committee and the relevant Infection Prevention and Control Committee. Refer to Appendix 9: Audit tool.

It is recommended that if a healthcare facility is unable to demonstrate that:

- > the internal audit process is effectively assessing the environmental cleaning by reviewing the acceptable quality level (AQL) or
- > appropriate corrective action is being taken when an AQL is not achieved;

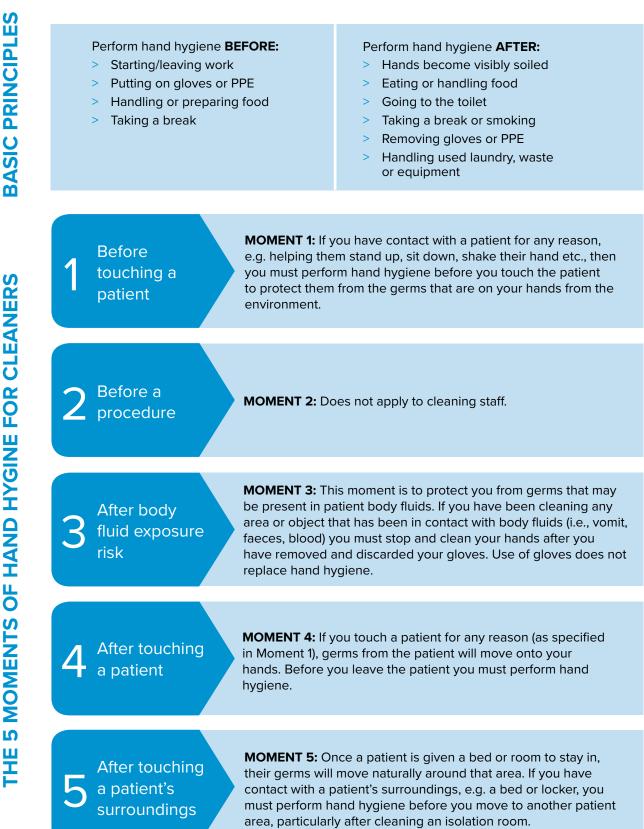
then another external audit should be scheduled within 12 months. If at the next audit the facility is able to demonstrate that the internal audit process is adequate and corrective action is applied appropriately, then the cycle for external audits reverts back to two yearly. If not, then the external audit cycle should remain yearly until the facility can demonstrate an effective internal audit process is in place.

8 Key reference documents

- 1. Australian Commission on Safety and Quality in Health Care (ACSQHC) Environmental cleaning: Emerging environmental cleaning technologies fact sheet. Available online at: <u>https://www.safetyandquality.gov.au/publications-and-resources/resource-library/environmental-cleaning-emerging-environmental-cleaning-technologies</u>
- 2. Australian Guidelines for the Prevention and Control of Infection in Healthcare, 2019. NHMRC Commonwealth of Australia. Available online at: <u>https://www.nhmrc.gov.au/about-us/publications/</u> australian-guidelines-prevention-and-control-infection-healthcare-2019
- 3. Australian/New Zealand Standard AS/NZS 4146:2000. Laundry practice.
- 4. Best practices for Environmental Cleaning for Prevention and Control of Infections. 2009. Provincial Infectious Diseases Advisory Committee, Ontario Canada.
- 5. Cleaning of the Healthcare Environment: <u>https://www.cec.health.nsw.gov.au/keep-patients-safe/infection-prevention-and-control/cleaning-and-reprocessing</u>
- 6. Cleaning Standards for Victorian health facilities, 2011. Government of Victoria. Available online at: http://www.health.vic.gov.au/cleaningstandards/
- 7. Dancer, S J. How do we assess hospital cleaning? A proposal for microbiological standards for surface hygiene in hospitals. Journal of Hospital Infection, 2004; 56: 10-15.
- 8. Environmental Cleaning Policy, 2020. NSW Health. Available online at: <u>https://www.cec.health.nsw.gov.au/keep-patients-safe/infection-prevention-and-control/cleaning-and-reprocessing</u>
- 9. Guidelines for Environmental Infection Control in Health-care Facilities, 2003. Centers for Disease Control and Prevention (CDC). Available online at: <u>https://www.cdc.gov/infectioncontrol/guidelines/</u> <u>environmental/index.html</u>
- 10. Mitchell, B G, Wilson, F, Dancer, S J, McGregor, A. Methods to evaluate environmental cleanliness in healthcare facilities. Healthcare Infection, 2013; 18: 23-30.
- 11. National Standards of Healthcare Cleanliness, 2021. Available online at: <u>https://www.england.nhs.uk/</u> publication/national-standards-of-healthcare-cleanliness-2021/
- 12. SA Health Idiopathic Environmental Intolerance or Multiple Chemical Sensitivity Policy Guideline, 2016. Available online at: <u>https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/</u> <u>conditions/chemicals+and+contaminants/idiopathic+environmental+intolerance</u>
- 13. SA Health Immunisation for Health Care Workers and Quarantine Workers Policy, 2021 <u>https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/cl</u> <u>inical+programs+and+practice+guidelines/immunisation+for+health+professionals/health+care+worker+im</u> <u>munisation+requirements</u>
- 14. The Revised Health Care Cleaning Manual. 2009. National Patient Safety Agency (UK). Available online
- 15. Vancomycin-resistant enterococci (VRE): Infection Prevention and Control Clinical Guideline , 2020: https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/cli nical+programs+and+practice+guidelines/infection+and+injury+management/healthcare+associated+infec tions/multidrug-resistant+organisms+mro/vancomycin-resistant+enterococci+vre



Appendix 1 When to wash your hands?



Appendix 2 Sample of general cleaning practices

IMPORTANT NOTE:

The information below is a guide regarding general cleaning practices of patient care areas. All staff must refer to their own healthcare facilities internal policies and procedures.

Before cleaning:

- > check whether transmission-based precautions apply
- > remove items that are not required from surfaces and the general area, where possible
- > follow manufacturer's instructions for proper dilution and contact time for cleaning and disinfecting solutions
- > gather materials required for cleaning before entering the room
- > perform hand hygiene upon entering the room
- > apply required PPE.

During cleaning:

- > progress from the least soiled areas (low-touch) to the most soiled areas (high-touch) and from high surfaces to low surfaces
- > remove gross soiling prior to cleaning and disinfection
- > use a damp mop to clean floors in preference to sweeping
- > avoid 'double dipping' of used cloths into clean solution
- > change cleaning solutions regularly; more frequently in heavily contaminated areas, when visibly soiled, and immediately after cleaning blood and body fluid spills
- > use disposable containers (e.g. liquid soap, cleaners and disinfectant); the practice of 'topping up' is not acceptable as it can result in contamination of both the container and solution.
- > vacuum carpets using vacuums fitted with HEPA filters
- > be alert for needles and other sharp objects; pick up sharps using a mechanical device e.g. tongs, and place into sharps container and report incident to the supervisor
- > collect waste, handling plastic bags from the top (do not compress bags with hands)
- > perform hand hygiene upon leaving the room.

After cleaning:

- > clean and dry tools used for cleaning and disinfecting between uses
- > launder mop heads daily; all washed mop heads must be dried thoroughly before re-use
- > use disposable mop heads for transmission-based precaution cleans and/or blood/body fluid spills
- > clean the housekeeping trolley
- > complete the required documentation and sign off sheets
- > report any elements that are in poor condition.

Appendix 3 Sample of discharge cleaning procedure

IMPORTANT NOTES:

The information below is a guide regarding discharge cleaning of patient care areas.

As a minimum all elements which are highlighted in Appendix 7: Cleaning schedule must be cleaned using the appropriate cleaning method (i.e., standard or transmission-based).

All staff must refer to their own healthcare facilities internal policies and procedures which must also outline who is responsible for undertaking certain tasks (i.e., cleaners, nurses, maintenance staff).

1. Assessment

- > check whether transmission-based precautions apply
- > walk through the room to determine what needs to be replaced (e.g., toilet paper, paper towels, soap, ABHR, gloves, sharps container) and if any special materials are required; this may be done before or during the cleaning process.

2. Assemble supplies

- > ensure an adequate supply of clean cloths is available
- > prepare fresh cleaning solutions according to the manufacturer's instructions.

3. Perform hand hygiene and put on gloves

4. Remove dirty linen

- > strip the bed, discarding linen into soiled linen bag; roll sheets carefully to prevent aerosols*
- > inspect bedside curtains (antimicrobial or cloth curtains) change if visibly soiled or if transmission-based precautions apply
- > inspect window treatments change if visibly soiled or if transmission-based precautions apply, and staff should refer to local policies, procedures and manufacturer's instructions. (see cleaning schedule for note)
- > remove gloves and perform hand hygiene.

5. Apply clean gloves and clean room, working from clean to dirty and from high to low surfaces of the room

- > use fresh cloth(s) for cleaning each patient's bedspace:
 - if a bucket is used, do not double-dip cloth(s) back into cleaning solution once used
 - change the cleaning cloth when it is no longer saturated with solution and after cleaning heavily soiled areas such as the toilet
 - if there is more than one patient in the room, use fresh cloth(s) for each and complete the cleaning in each bed space before moving to the next
- > start by cleaning doors, door handles, push plate and touched areas of doorframe
- > check walls for visible soiling and clean if required; remove tape from walls, clean stains
- > clean light switches and thermostats
- > clean wall mounted items (e.g., ABHR dispenser, glove box holder, top of suction bottle, intercom and blood
- * In some metropolitan and regional hospitals the duties in the areas highlighted are performed by the nursing staff. Refer to local health unit instructions.

pressure manometer).

- > check and remove fingerprints and soiling from low level interior glass partitions, glass door panels, mirrors and windows with glass cleaner
- > clean all furnishings and horizontal surfaces in the room including chairs, window sill, television, telephone, computer keypads, night table and other tables or desks; lift items to clean the tables, paying particular attention to high-touch surfaces
- > clean equipment (IV pole and pump, walkers, wheelchairs)
- > clean inside and outside of patient cupboard or locker.

6. Clean the bed *

- > clean top and sides of mattress, turn over and clean underside
- > clean exposed bed springs and frame
- > check for cracks or holes in mattress and have mattress replaced as required
- > inspect for evidence of pest infestation
- > clean headboard, food board, bed rails, call bell and bed controls; pay particular attention to areas with visible soiling and surfaces frequently touched by patient
- > clean all lower parts of bed frame, including casters
- > allow mattress to dry.

7. Clean bathroom/shower

8. Clean floors

9. Review checklist and sign documentation

- > review cleaning checklist to ensure all elements have been cleaned
- > sign work log.

10. Disposal

- > place soiled cloths in designated container for laundering
- > sharps disposal containers are not be filled above the mark that indicates the maximum fill level
- > do not dust the top of the sharps container
- > remove soiled linen bag and replace with fresh bag
- > place any waste in receptacles
- > close waste bags and remove; clean waste can/holder if soiled and add a clean bag.

11. Remove gloves and clean hands with ABHR: if hands are visibly soiled, wash with soap and water; do not leave room wearing gloves

- 12. Remake bed *
- 13. Replenish supplies as required such as gloves, ABHR, soap, paper towel, toilet brush
- 14. Return cleaned equipment to the room (IV poles and pumps, walkers, commodes) to clean storage areas.

* In some metropolitan and regional hospitals the duties in the areas highlighted are performed by the nursing staff. Refer to local health unit instructions.

Appendix 4: Management of blood and body substance spills

IMPORTANT NOTES:

The information below is a general guide regarding the management of blood and body fluids spills.

All cleaning staff should follow internal policies and procedures.

Spot cleaning

- > select appropriate PPE
- > wipe up spot immediately with a damp cloth, tissue or paper towel
- > discard contaminated materials
- > perform hand hygiene.

Small spills (up to 10cm diameter)*

- > assemble the materials required for cleaning the spill
- > select and put on appropriate PPE
- > wipe up spill immediately with absorbent material
- > place contaminated absorbent material into impervious container or plastic bag for disposal
- > clean the area with warm detergent solution using disposable cloth or sponge
- > disinfect the entire spill area with a TGA approved hospital-grade disinfectant and allow it to stand for the amount of time recommended by the manufacturer
- > remove PPE and perform hand hygiene.

Large spills (greater than 10cm diameter)*

- > assemble the materials required for cleaning the spill
- > inspect the area around the spill thoroughly for splatters or splashes
- > restrict the activity around the spill until the area has been cleaned and disinfected and completely dried
- > select and put on appropriate PPE
- > cover the area of the spill with an absorbent clumping agent and allow to absorb
- > use disposable scraper and pan to scoop up absorbent material and any unabsorbed blood or body fluids
- > place all contaminated items into impervious container or plastic bag for disposal
- > discard contaminated materials
- > mop the area with detergent solution
- > disinfect the entire spill area with a TGA approved hospital-grade disinfectant and allow it to stand for the amount of time recommended by the manufacturer
- > remove PPE and perform hand hygiene.

* There are all-in-one spill kits and packs are available for purchase.

Spills on carpeted areas*

- > assemble the materials required for dealing with the spill
- restrict the activity around the spill until the area has been cleaned and disinfected and is completely dry
- > select and put on appropriate PPE (i.e., put on gloves and if there is a possibility of splashing, wear a gown and facial protection)
- > mop up as much of the spill as possible using disposable towels
- > disinfect the entire spill with a TGA approved hospital-grade disinfectant and allow it to stand for the amount of time recommended by the manufacturer
- > safely dispose of the clean-up materials and gloves by placing them in the waste receptacle
- > other methods/equipment may be used for the cleaning process provided that it can be demonstrated that the same outcome is achieved (e.g. deep clean carpet cleaning machines).

* There are all-in-one spill kits and packs are available for purchase.

NOTES

- 1. Spill Kit: a spill kit should be readily available in each clinical area and should include a scoop and scraper, single-use gloves, protective apron, surgical masks and eye protection, absorbent agent, clinical waste bags and ties, and detergent. All parts should be disposable to ensure that cross contamination does not occur.
- 2. Disinfectant usage: the use of a chlorine-based product such as sodium hypochlorite is not necessary for routinely managing spills but it may be used in specific circumstances. There is evidence supporting the use of sodium hypochlorite to inactivate various blood borne and gastrointestinal viruses, and bacteria such as *Clostridioides difficile*. The considerations to use sodium hypochlorite should be based on risk assessment of the environment, the spill, risk of transmission of disease, and the surface area and potential hazards with using the product.
- 3. Alcohol-based solutions should not be used to clean spillages.
- 4. Carpeting: is generally discouraged for areas where spills of blood or other body fluids may be anticipated (e.g. procedure rooms, ICU). Carpeting, if used, should be easily removed and replaced (e.g., carpet tiles).
- 5. Soft furnishings: If a spillage has occurred on soft furnishings, a detergent and disinfectant must be used to clean the area thoroughly. Do not clean soft furnishings with a disinfectant such as sodium hypochlorite as it is likely to bleach the fabric. Soft furnishings may also be steam cleaned. After cleaning, the room may need to be left vacant for 24 hours or more to allow for adequate drying time, especially if steam cleaning of soft furnishings and upholstery is required.

Please refer to the Cleaning Standard for Healthcare Facilities Toolkit for the following appendices.

Appendix 5: Risk matrix and classification of functional areas supporting information

Please refer to separate document titled: Cleaning Standard for Healthcare Facilities – Risk Matrix and Functional Area Classification

Appendix 6: Risk classification of functional areas within hospitals

Please refer to separate document titled: Cleaning Standard for Healthcare Facilities – Risk Classification

Appendix 7: Cleaning schedule

Please refer to separate document titled: Cleaning Standard for Healthcare Facilities – Cleaning Schedule

Appendix 8: Audit tool (internal)

Please refer to separate document titled: Cleaning Standard for Healthcare Facilities – Environmental Cleaning Audit – Score Sheet

Appendix 9: Audit tool (external)

Cleaning Standard for Health Facilities – External Audit Tool



Cleaning Standard for Healthcare Facilities

This Cleaning Standard can be accessed at the Department for Health and Wellbeing Internet site www.sahealth.sa.gov.au/infectionprevention

For more information

Department for Health and Wellbeing Adelaide, South Australia 5000

Telephone: 1300 232 272 Email: HealthICS@sa.gov.au



www.ausgoal.gov.au/creative-commons

Official

© Department for Health and Wellbeing, Government of South Australia. ABN 97643356590. ISBN 978-1-76083-418-0. FIS: 21078. April 2022.

